December 17, 2004

Randy Segawa
California Department of Pesticide Regulation
1001 I Street, P.O. Box 4015
Sacramento, CA 95812–4015

Re: Draft California Department of Pesticide Regulation Environmental Justice Pilot Project, Pesticide Air Monitoring in a Rural Community

Dear Mr. Segawa:

Western Plant Health Association (WPHA) submits the following comments on the California Department of Pesticide Regulations' (CADPR) Daft Environmental Justice Pilot Project. Before addressing the specifics of the Pilot Project Draft Outline, we have a few overall comments.

- This un-mandated project will put unnecessary financial stress upon CADPR, which is already feeling budgetary constraints. CADPR should consider taking inventory of existing scientific peer reviewed studies and avoid any duplications. Rather than initiate another monitoring program, we believe that CADPR's limited resources could be best utilized by analyzing existing data already available. In particular, efforts by CADPR in Lompoc and by USEPA in McFarland Park have already demonstrated very low to non-detectable levels of pesticides below any levels likely to cause adverse health effects. Summaries of existing studies could meet the objectives of CADPR's Pilot Project without having to exert additional resources for monitoring and analysis.
- The project as described in the CADPR outline is only one replicate (one community) and has no control (a non-rural community), which therefore does not meet scientific standards. We are concerned about funding a study that cannot arrive at any credible conclusions. The project also looks at only one source of airborne exposure, pesticides, without consideration of the numerous other airborne sources such as dioxin/PCBs, heavy metals, radon, asbestos, pollen, molds, etc.
- DPR must develop a "No Effects Level" or a "Limit of Quantification" level below which they will not report. Since this data will be available to the public, reports of trace or barely measurable amounts of pesticides that are "detectable" but not "quantifiable" could lead to misrepresentation and undue concern for residents and others. With the advanced technology and instrumentation available today, scientists can find micrograms and nanograms of molecules in the air at parts per million, parts per billion, and potentially even lower levels.

WPHA would like to address the questions raised by the Department in the Pilot Project Outline in greater detail as follows:

1. What should be the objectives of the air monitoring study?

We agree with the objectives mentioned by CADPR in the Pilot Project Outline, however, we feel the objectives should be scientific. Any objectives chosen will be scientifically limited, as mentioned previously one community can not be a determination of what air quality is in all rural communities in the Central Valley. The Central Valley is very diverse, not only in crops and topography but in ethnicity and economic diversity. For this project to come to a scientific conclusion, more than one site needs to be considered for monitoring, one rural and one non-rural. Also, isolating pesticides alone without including other potential contributors is inappropriate and skews the data. As was done with the Lompoc and McFarland Park studies, air monitoring should investigate exposure to metals, vehicle exhaust, natural environmental contributors (radon, asbestos, pollen, etc.) and other factors so that the appropriate weight can be given to sources of airborne exposures. DPR will be responsible for pesticide monitoring, will the Air Resources Board also have a companion program to look at other air contaminates that could affect the health and well being of the selected community?

2. How Should DPR Select the Community to Monitor?

It is very difficult to select a representative area in the Central Valley. One community can not be a determination of what the air quality is in all rural communities in the Central Valley (one size doesn't fit all concept). Our suggestions for selecting a specific site: The community should be agriculturally based, it should be a balance of people of both ethnic and economic diversity, schools should be near rural agricultural production, there should be agricultural diversity, the cropping patterns should change from winter to summer and there should be winter crops and summer crops. If additional monitoring study/studies are conducted, WPHA suggests a community that has a mix of row crops such as corn and cotton, forage crops such as alfalfa, tree and vine crops such as almonds, stone fruits and grapes, and some winter vegetable productions including onions, garlic, lettuce and other leafy vegetables.

3. How Should DPR Select the Pesticides to Monitor?

We would suggest that DPR choose a pesticide based upon a minimum of a three year average and pick the 20 most used products, by volume and by season of use as seen in the Pesticide Use Reports. DPR should not base the choice of pesticides on criteria such as "Restricted Use Pesticides", Proposition 65 Pesticides, or pesticides with Danger or Warning Signals. To do so would bias your analysis toward alleged "high risk" pesticides when there may be little or no risk from an inhalation or dermal exposure reference point. We suggest you target products that are being used in a window of application most used. DPR should also consider what is the use season for the pesticides

to be monitored? If sampling is to be conducted year round, it may be useful to build more than one list of pesticides to be sampled and adjust the list to fit those products that are being applied during the sampling program

It is also not clear whose standards will be used to determine whether levels exceed those of human health concerns. Are these USEPA standards or CADPR standards? Will the pesticides monitored have clear defined health effects levels prior to the onset of exposure monitoring? This needs to be clarified. Also, it is not clear how the risk assessment will be generated–what toxilogical endpoints will be chosen, standard breathing rates used, and duration of exposure. In the Department's outline you express the desire to investigate the cumulative effects of multiple pesticide exposure, yet the fact that there are no corresponding toxicological data renders this line of research inconclusive and inappropriate. There are limitations to interpreting exposure and relating it to adverse health effects especially when considering cumulative effects.

As in the Lompoc study, an investigation into air concentrations of other airborne irritants such as silica, pollen, molds, radon and others should be considered. We would also suggest that air-sampling durations be at least 12 hours so that a time weighted average can be calculated.

In summary, WPHA believes that the objectives of the CADPR Environmental Justice Pilot Project would be best met by the Department focusing its efforts on continuing its existing programs in enforcement, environmental monitoring, and risk assessment activities. Furthermore, WPHA believes that another air monitoring study for pesticides is a redundant exercise and not the most efficient use of the Department's limited resources. Rather, the Department should review and analyze information already available to them to meet the objectives of the CADPR Pilot Project.

Thank you for the opportunity to comment.

Sincerely,

Kevin Keefer
Director Government and Regulatory Affairs